

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram:

- 1. Shri Ashok Basu, Chairman**
- 2. Shri K.N. Sinha, Member**

**Petition No. 48/2003
(Suo motu)**

In the matter of

Open access in inter-state transmission

ORDER

Under clause (j) of sub-section (2) of Section 178 of the Electricity Act, 2003 (hereinafter referred to as “the Act”), the Commission is empowered to make regulations for payment of transmission charges and a surcharge, if any, for open access for use of the transmission system owned by the Central Transmission Utility. Similarly, under clause (l) of sub-section (2) of Section 178 of the Act, the Commission is further authorised to specify by regulations the payment of transmission charges on account of use of the transmission system of other transmission licensee. Further, in accordance with sub-section (47) of Section 2 of the Act, the terms and conditions for open access in inter-state transmission are required to be specified by the Commission through the regulations. The regulations made under the Act are to be finalised after previous publication.

2. As a part of the consultative process, a concept paper prepared by the Commission’s staff was circulated among the stakeholders and other interested persons during June 2003 with a view to inviting their suggestions before drafting of regulations. After hearing the stakeholders concerned on 24th & 25th September, 2003, we had issued an order in the matter of open access in inter-state transmission on 14.11.2003. Subsequently, based on the decisions contained in the said order dated 14.11.2003, the

Central Electricity Regulatory Commission (Terms and conditions for Open Access) Regulations, 2003, (hereinafter referred to as “the draft regulations”) on open-access were published on 2.12.2003 with a fresh opportunity to the stakeholders of making their comments and suggestions on the proposals contained in the draft regulations. In response, we have received comments and suggestions from the stakeholders, which will be discussed at the appropriate places in this order.

Date of implementation

3. The draft regulations propose that they shall come into force with immediate effect, that is, the date of publication in the official gazette. POWERGRID has suggested that regulations should be implemented from 1.4.2004, as this will allow time for resolving all the relevant issues and fully understanding the intricacies involved.

4. With the enactment of the Act, the provisions on open access in the inter-state transmission system have already come into effect. Therefore, the modalities for its smooth implementation have to be finalised at the earliest. It is for this purpose that we proposed the time limits for certain actions to be completed by different agencies like, the Central Transmission Utility, the Regional Load Despatch Centres, the State Load Despatch Centres, etc. The avenues, intricacies as well as problems will only be understood over a period of time after the actual implementation of the final regulations. We, therefore, are not inclined to stipulate 1.4. 2004 as the date of implementation. However, in the light of 60 days time being allowed to users of the inter-state transmission system other than those having firm allocation from the central generating stations and the bulk power transmission agreement with the Central Transmission Utility, we direct that provisions regarding bidding for reservation of transmission capacity shall come into effect after a period of 90 days from the date of coming into force of the regulations on open access, on publication in the official gazette. Till that time, the reservation of the capacity shall be done on first-come-first-served basis provided that the period for such reservation shall not exceed this period of 90 days.

Definitions

5. In the draft regulations, the term "embedded customer" is defined as a person who is not a direct customer, and a direct customer is defined to mean as a person directly connected to the inter-state transmission system. Koyela Energy Resources Pvt. Ltd (KERPL) has submitted that definition of embedded customers needs more clarity.

6. We have considered the issue afresh in the context of the definitions of direct customer and embedded customer given in the draft regulations. Any particular element of the transmission system owned by the State Transmission Utility or the other transmission utilities operating within the State, may at times form part of the inter-state transmission system as defined under the Act, if it is used in any transaction for or is incidental to transfer of power outside the State territory. However, once the transaction is concluded, this element ceases to be part of the inter-state transmission system. Thus, the elements of the transmission system owned by the State Transmission Utility or the other transmission utilities operating within the State cannot form part of the inter-state transmission system permanently. However, the system owned or operated by the Central Transmission Utility always forms part of the inter-state transmission system in view of the definition of the term given under the Act. The terms 'direct customer' and 'embedded customer' have been used mainly for the purpose of energy accounting. Presently, the Special Energy Meters have been, installed, inter alia, at the interface between the transmission systems owned by the Central Transmission Utility and the State Transmission Utility to facilitate energy accounting. In order to bring clarity in the matter of energy accounting, we are satisfied that the definition of direct customer needs to be changed so as to limit its scope to the open access customers directly connected to the transmission system owned by the Central Transmission Utility. All other customers (which are connected to the system owned and operated by the State Transmission Utility or other transmission utilities operating within the State) shall be the embedded customers.

Categorisation of Open Access Customers

7. In the draft regulations, based on the duration of use of the transmission system, the open access customers have been divided into two categories; namely, the short-term open access customers and the long-term open access customers. The persons availing or intending to avail the open access to the inter-state transmission system for a period of one year or less are classified as the short-term open access customers and the persons availing or intending to avail the open access to the inter-state transmission system for a period of five years or more have been included in the category of the long-term open access customers. Some of the stakeholders have raised doubts in regard to the category of the open access customers with requirement between one and five years. Some of them have pointed out that there is gap between the maximum duration for short-term customers and minimum duration for long-term customers. Shri Bhanu Bhushan, Director, POWERGRID in his personal capacity has suggested categorisation of the open access customers in the context of usage of capacity. He has suggested one category to include those who propose to use surplus capacity on different parts of the existing transmission system from time to time and the other category should include those who want a usage right over the transmission system or a part thereof. West Bengal State Electricity Board (WBSEB) has suggested categorisation into firm and non-firm customers and has contended that the original beneficiaries should be treated as firm customers, irrespective of duration and usage. Persons other than original beneficiaries should be termed non-firm customers.

8. The availability of the transmission system can be anticipated with a reasonable degree of certainty by the Regional Load Despatch Centres and hence the short-term customers are unlikely to be deprived of the service to any significant extent. However, in our opinion, the assessment of future availability of the transmission system may not always be possible with a reasonable accuracy for a period longer than one year. The maximum duration of short-term open access should, therefore, be limited to one year and the short-term customers will have to apply again up to a maximum duration of one year at a time if the need of the short-term customer still persists beyond the original

period of the access granted. In such a situation, the open access will be allowed subject to availability of the transmission system. This also takes care of the observations made by some of the stakeholders that there existed a gap between the maximum duration for short-term customers and minimum duration for long-term customers. It is seen that the categorisation suggested by Shri Bhanu Bhushan is essentially in the terms adopted by us. The categories of customers suggested by Shri Bhanu Bhushan generally correspond to short-term and long-term customers in the classification elucidated in this order. In so far as the suggestion for categorisation of the customers into 'firm' and 'non-firm' categories made by West Bengal State Electricity Board, we would like to point out that this aspect has already been considered by us in our order dated 14.11.2003. As the requirement of even the firm customers can be curtailed under certain circumstances, the criteria for categorisation suggested by West Bengal State Electricity Board does not seem to be sound.

9. Power Grid Corporation of India Ltd (POWERGRID) has observed that there cannot be allocation of transmission capacity since it is difficult to assign capacities for transmission elements and actual power flows over parallel paths are determined by laws of physics. According to POWERGRID, prevailing system of allocation of power from the central sector generating stations to the States requires that transmission of power on account of such allocation should continue to get first priority and such beneficiaries should automatically get the status of long-term customers. POWERGRID has suggested that long-term access should be provided corresponding to the life of the asset to facilitate cost recovery by the transmission licensee. In the opinion of POWERGRID the short-term customers will normally utilise inherent surplus capacities in the transmission system, which are available due to (i) application of (N-1) or (N-2) criterion in system planning subject to security, stability and reliability of the power system (ii) variations in power flows over the system and (iii) spare transmission capacity deliberately built to accommodate future load growth. The long-term transactions will be possible only when the power system has been planned for such transactions. POWERGRID has observed that the on-going operation of the power system in the country should not get destabilised during implementation of various provisions of the Act. It has also observed that the

provision of open access in the Act cannot be taken to be permitting indiscriminate usage of the transmission system, to the detriment of the security and reliability of the power system in the country.

10. We have noted that POWERGRID has expressed difficulty in allocating transmission capacity. The transmission system is planned and expanded in accordance with the planning criteria. Hence, in our opinion there should be no difficulty in ascertaining if entry of a new long-term open access customer will lead to violation of the planning criteria and if so, what is the optimum expansion required to cater to the needs of the new long-term open access customer. Once the system has been strengthened to cater to the needs of the new long-term open access customer, he should be able to transfer desired power (MW) between specified point(s) of injection and point(s) of drawal under the normal conditions. Accordingly, we have decided that a new definition of "Allotted transmission capacity" be added in respect of the long-term customers. This allotment of transmission capacity shall not indicate element-wise use but shall refer to capability of the system to transfer desired quantum of power from specified point(s) of injection and point(s) of drawal. The short-term customers shall not have any "right" over the transmission system but shall get permission for transfer of power between the specified points. They shall be able to transfer power depending on the availability of spare capacity in the transmission system. This availability may be on account of one of the following reasons, as pointed out by POWERGRID:

- (a) Inherent design margins,
- (b) Margins available due to variation in power flows, and
- (c) Margins available due to in-built spare transmission capacity created to cater to future load growth.

11. We agree with the views of POWERGRID to the extent that duration of access in case of long-term customers should be long enough to allow full cost recovery. At present, debts are available for a period of 10-12 years, which period may increase in future. Even after repayment of loans, a utility deserves to have revenue stability for few more years. The period of 5 years for long-term access as proposed in the draft

regulations falls short on this criterion. We have also noted that the terms of the transmission licence has been stipulated as 25 years in the Act. Accordingly, with a view to encouraging investment in transmission sector, we feel that the minimum period of long-term access needs to be increased to 25 years. However, the long-term customers shall have exit option either by surrendering their allotted transmission capacity or by transferring it to other person intending to be a long-term customer. This may result in financial loss to the transmission licensee due to some assets getting stranded or otherwise. We, therefore, direct that any surrender or transfer of allotted transmission capacity by a long-term customer shall be done only with the prior approval of the Commission and after payment of such compensation as may be determined by the Commission.

12. On the issue of treatment to long-term open access customers as original beneficiaries, Bombay Suburban Electricity Supply Company (BSES) has made following observations:

- (a) If cautiously planned spare capacity is allocated to long-term open access customers, the original beneficiaries will have to compete with others for getting back the capacity, which belongs to them. In such a situation, there may not be incentive for an original beneficiary to plan for construction of spare capacity in first place.
- (b) The transmission charges paid by the original beneficiary should be less than that paid by a new long-term open access customer. If there is no added advantage to an original beneficiary, again there may not be any incentive for the original beneficiary to construct a line with spare capacity.

13. However, according to BSES the right of first use cannot be granted to the original beneficiary for all times to come. In order to ensure better planning, use of resources and to prevent blocking transmission right on key routes for an indefinite period of time, the right to first use should be limited to a period, say, a maximum of two years. BSES has

also raised the interesting question of parity between the original beneficiaries and the newly entering long-term customers.

14. We are of the opinion that in any optimum planning, construction of spare transmission capacity is inevitable because when a line is constructed, it may be desirable to cater to the future requirements and build spare capacity rather than leaving to build new line as and when the need arises. However, if a long-term customer can be accommodated based on availability of spare capacity for a sufficiently long period, new transmission elements may have to be constructed at a later date, the growing needs of long-term customers. The transmission charges for the new transmission elements shall in that case be shared by the new long-term customers also. Thus, the investment which otherwise is required to be made gets deferred to a later date, if the spare transmission capacity available for a sufficiently long time is utilised by a new long-term customer. It is a win-win situation for the existing beneficiaries as well as the new long-term open access customers.

15. Gujarat Electricity Board (GEB) has submitted that the transmission system developed and maintained by POWERGRID so far is from the revenue generated by POWERGRID from the State Electricity Boards or their successor entities, and, therefore, allocation of the transmission capacity to others should not be made from the surplus reserved capacity, without the concurrence of the existing beneficiaries. Railway Board has suggested that transmission capacity for short-term and long-term open access customers may be earmarked.

16. The suggestion made by GEB does not seem to be practical for the reason that obtaining such concurrence will take long time and by the time the concurrence becomes available, the need of the short-term open access customer may no longer exist. Resultantly, the opportunity for power trading may be lost. The Regional Load Despatch Centres are in a best position to assess the availability of transmission capacity and hence the responsibility of nodal agency for the short-term customers has been entrusted to them. However, it has been ensured that interest of the long-term open access

customers is protected as they have over-riding right to the use of the transmission system and the transmission charges recovered from the short-term customers are used for reduction in the transmission charges payable by the long-term customers. In case of allowing access to the long-term customers, the nodal agency shall consult the transmission licensees involved. The transmission capacity cannot be earmarked for short-term and long-term customers as suggested by Railway Board due to nature and procedure for allowing access for the short-term customers, as discussed earlier.

Allotment Priority

17. The following proposals have been made in the draft regulations on the question of allotment priorities of the open access customers:

- (i) Allotment priority of a long-term open access customer shall be higher than that of a short-term open access customer.
- (ii) Among the open access customers within a category, the person applying for open access for a longer duration shall have preference over the person applying for a shorter duration.

18. Adani Exports Limited has commented that certain power transactions of short-term duration may be of vital importance. Such transactions should be given higher priority than long-term transactions. KERPL has suggested that certain important short-term transactions should be given higher priority on specific approval of the Regulatory Commission concerned.

19. BSES has opined that giving higher priority to the long-term customer and recovery from the short-term customer for reduction in charges payable by the long-term customer is appropriate if the transmission line is set up for use by certain beneficiaries and the entire cost is being recovered through these beneficiaries. However, according to BSES when a merchant transmission line is being set up, the entire risk of cost recovery is taken by the licensee. Under such circumstances, when the short-term customer offers higher price than a long-term customer, the discretion to award open access should be

left to the transmission licensee and award may not be necessarily on the basis of period of use. BSES has further contended that the Act permits the transmission licensee and open access customers to mutually agree on the terms and conditions for open access and only in case of dispute, the matter is required to be referred to the Commission. In light of the statutory provisions, if the transmission licensee and a short-term open access customer enter into an open access agreement they would be not be transcending the statutory limits. BSES has requested for amendment in the regulation accordingly. BSES has further observed that the proposal contained in the draft regulations to provide higher priority to the open access customer of longer duration and to surrender the allotted capacity may give rise to speculation and gaming. A short-term customer for the purpose of getting open access may deliberately quote a higher period requirement and surrender the allotted capacity after actual usage is over. BSES has raised a question of treatment of application for open access – whether on first come first served basis or any other basis.

20. Independent Power Producers Association of India (IPPAI) has suggested that in the congested transmission corridors, the Regional Load Despatch Centre should carry out bidding and the bidder quoting the highest charges should get transmission right for the duration of the contract. In case of bids with same value, the transmission capacity may be shared on pro rata basis. IPPAI has also suggested that to eliminate dominance by single big player, no single trader or the State Electricity Board should be allowed to use more than 25% of the available capacity, unless there is no other demand.

21. National Thermal Power Corporation Ltd (NTPC) has opined that within the same category of customers with same duration, the allotment priority should be based on cost of power. Further, according to NTPC, if surplus power is available at any central generating station and it is diverted to other beneficiaries by the generator or its subsidiary company, it should be given same priority as given to transmission of the allocated power. Railway Board has suggested that among the open access customers of equal duration, MW-mile should be the basis for deciding priority.

22. We have considered the suggestions and comments received on the issue of allotment priority. In regard to the suggestion that certain important transactions of shorter duration should be given higher priority, we may point out that a prudent distribution licensee will not depend on single source of supply to meet all its requirements. He will normally have a basket of supply contracts of varying duration. However, we agree that a distribution licensee may attach higher value to a transaction, irrespective of duration. To address the issue, we feel that if demand for a particular transmission corridor exceeds availability, bidding for reservation of transmission capacity to the short-term open access customers may be a better option. Those who perceive their transaction to be of over-riding importance shall quote a higher price. We have dealt with this issue in greater detail while discussing the issue of transmission pricing in this order. With the provision for bidding, the other issues raised by BSES regarding the basis of treatment of applications (First come, first served or any other basis) and the possibility of gaming by deliberately quoting higher duration will also get resolved.

23. One of the objectives of the statutory provisions on open access is to have functional unbundling between generation and transmission. This would mean that an integrated utility would not be in a position to influence or obstruct any power supply contract more competitive than its own power. This aspect of non-discrimination was not explicitly covered in the draft regulations. We, therefore, direct that the following regulation to prohibit preference for self-use of the transmission system by an integrated utility over use by others, may be inserted in the regulations:

“Within a category (long-term or short-term), there shall be no discrimination between open access customers and self-use by an integrated entity. The transmission licensee shall declare existing long-term customers using its system (including self-use and use by unbundled agencies previously integrated) either on their website or on the website of the Regional Load Despatch Centre or the State Load Despatch Centre concerned within 180 days of the coming into force of these regulations. All future requests for use of the

transmission system for inter-state transmission shall be considered in accordance with these regulations.”

24. Similarly, there should be no discrimination in access to the transmission system on the basis of ownership of generation. This means that a supplier should be able to market his power purely on commercial terms, without getting any undue preference in the matter of transmission over other suppliers. Keeping this in view, we do not find any merit in the suggestion of NTPC to give higher priority on the basis of cost of power or ownership. In our opinion, all future requests for transmission access shall have to comply with the provision of open access enacted in the Act. Keeping this in view, the regulations should, in general, use the term “transmission customers”. The term “open access customers” has to be used only while referring to transmission customers getting access after commencement of these regulations.

25. Clause (c) of Section 40 of the Act requires all transmission licensees to provide non-discriminatory open access. Further, from the definition of open access as provided in the Act, the non-discriminatory open access has to be provided in accordance with the regulations specified by the Appropriate Commission. Also, under Clauses (c) and (d) of sub-section (1) of Section 79, the function of regulating the inter-state transmission and determination of tariff for inter-state transmission are the fundamental functions assigned to the Central Commission. The different provisions of the Act are to be interpreted harmoniously. In the process of interpreting any particular provision, the other provisions cannot be lost sight of. In view of the provisions of the Act, we do not find merit in the suggestion of BSES that the regulations notified by the Commission are not applicable to the transmission licensees. As regards the issue of merchant transmission line raised by BSES, the Commission will consider the issue in detail as and when a merchant transmission line comes into existence. However, even licensees owning or operating merchant transmission line will have to provide non-discriminatory open access as per Section 40 of the Act.

Nodal Agency

26. The Central Transmission Utility is proposed to be nominated as the nodal agency for arranging the long-term open access and the Regional Load Despatch Centre of the region where point of drawal of electricity is situate, for short-term open access.

27. POWERGRID has suggested that the nodal agency for all embedded short-term open access customers should be their host State Load Despatch Centre and for embedded long-term open access customers, the nodal agency should be State Transmission Utility. Further, according to POWERGRID, for the convenience of the open access customers, the application may be submitted to Director (Opns.), POWERGRID and Director (Projects), POWERGRID for short-term and long-term customers respectively. POWERGRID has suggested that the responsibility of collecting and disbursing transmission charges as well as scheduling and system operation charges should not be entrusted to the Regional Load Despatch Centres. In its opinion, the commercial terms and payments should be settled by the open access customers with the respective State Load Despatch Centres /Regional Load Despatch Centre and the transmission licensees.

28. PTC has expressed a view that in line with Section 28 (3) (c) of the Act, the Regional Load Despatch Centres should take over the function of commercial accounting and preparation of Regional Energy Account, at present being done by the Regional Electricity Boards and in case of disparity in Regional Energy Accounts it should be the responsibility of the nodal Regional Load Despatch Centre to resolve.

29. NTPC has sought co-ordination procedure between the Regional Load Despatch Centre and the Central Transmission Utility to be spelt out, since, both the short-term and the long-term open access customers will be using same transmission system. Prayas has also expressed that availability and allocation of surplus transmission capacity is likely to be a dynamic process requiring good coordination between the Regional Load

Despatch Centres and the Central Transmission Utility. Therefore, one of these agencies should have the mandate of achieving coordination.

30. KERPL has suggested that the Central Transmission Utility or the nodal Regional Load Despatch Centre, as the case may be, should further coordinate with the State Transmission Utilities and other Regional Load Despatch Centres, the Regional Electricity Boards, the State Load Despatch Centres and other agencies.

31. We have considered the views of POWERGRID on the issue of nodal agency. We are of the opinion that the jurisdiction of the Regional Load Despatch Centre is not limited to the Central Transmission Utility system, but extends to the inter-state transmission system as a whole and to some extent to the whole of the power system in the region [Section 28(1) and 28(2)(d) of the Act]. Therefore, we maintain that the nodal agency for the short-term customers shall be the Regional Load Despatch Centre in whose area the point of drawal is located. However, in case of the long-term customer, if the Central Transmission Utility system is not involved, the nodal agency shall be the State Transmission Utility in whose area the point of drawal is located. For other long-term customers, using even a small part of the Central Transmission Utility system, the Central Transmission Utility shall be the nodal agency. We have left preparation of detailed procedure, application formats, etc to the Central Transmission Utility and the Regional Load Despatch Centres and hence they are free to specify the authority to whom the application should be sent.

32. We have taken a conscious decision to entrust the responsibility of collection and disbursement of charges to the Regional Load Despatch Centres. Firstly, we are convinced that only one agency is needed to collect and disburse the transmission charges and scheduling and system operation charges as it is not possible to approach all the agencies involved and make payments in case of the short-term customers due to limited time available. This task itself may take a few weeks and valuable opportunity for transaction may be lost. Having been satisfied on the need for one agency to collect and disburse charges, the next issue is which agency is best-suited to undertake this

responsibility. We have no doubt in our mind that the nodal Regional Load Despatch Centre is best-suited to perform the function as it is any way required to co-ordinate with all the players involved in the transactions. On the observation that this role may be a digression from the statutory functions of the Regional Load Despatch Centres, we can only say that assuming new responsibilities with changing times is expected of progressive organizations. To compensate for the added responsibility, we direct that 2% of the billed amount for the transmission charges and scheduling and system operation charges shall be payable as handling and service charges to the nodal Regional Load Despatch Centre, which shall not be adjusted against the fees and charges for Regional Load Despatch Centres approved by the Commission.

33. On the issue of co-ordination between the Central Transmission Utility and the Regional Load Despatch Centres, raised by some of the stakeholders, we are of the opinion that the Central Transmission Utility may consult other agencies concerned on case-to-case basis. Further, if a customer is granted the long-term access, the co-ordination of the Regional Load Despatch Centre in scheduling and system operation is a necessity, which needs no emphasis. In so far as the short-term customers are concerned, the Regional Load Despatch Centre is fully aware of the anticipated transactions in near future and hence is in a situation to grant or deny short-term access, based on anticipated flow pattern.

34. The allocation of responsibilities among various agencies, including the Regional Load Despatch Centre and the Regional Electricity Board was done by the Commission in the IEGC, based, *inter alia*, on the provisions of the law. A number of stipulations in the IEGC may have to be revised based on the provisions of the Act. The Commission will take appropriate action in the matter separately. The issue of handing over responsibility of Regional Energy Accounting from the Regional Electricity Board to the Regional Load Despatch Centre shall have to be addressed while revising the IEGC in exercise of its statutory powers under the Act.

Procedure for Long-Term Customers

35. The following procedure has been proposed in the draft regulations in regard to the long-term open access customers:

- (a) An application for long-term open access shall be submitted to the Central Transmission Utility as the nodal agency.
- (b) The application shall contain such details as capacity needed, point of injection, point of drawal, duration of availing open access, peak load, average load and any other additional information that may be specified by the Central Transmission Utility.
- (c) The application shall be accompanied by a non-refundable processing fee of Rs one lakh payable in the name and in the manner to be decided by the Central Transmission Utility.
- (d) Based on system studies conducted in consultation with the Regional Load Despatch Centre and the State Transmission Utility concerned or otherwise, if in the opinion of the Central Transmission Utility the open access can be allowed without any further system strengthening, it shall intimate to the applicant the date from which such open access shall be allowed.
- (e) Where the Central Transmission Utility is of the opinion that open access cannot be allowed without system strengthening, it shall identify the scope of work for system strengthening, the estimated cost and the probable date from which the open access can be allowed and the applicant shall be informed accordingly, within 90 days of receipt of the application.

36. Adani Exports has commented that if additional transmission network is to be constructed, it should be done under the regional or national concept, otherwise the prohibitive costs may not make the trading proposal financially attractive. POWERGRID has suggested that fee of Rs 1 lakh proposed in the draft regulations should be considered as application fee for long-term customers only. The processing fee for system study preliminary investigation, scope of work, cost estimates, preparation of

report, etc., has to be extra which shall depend on the extent of work involved. The application fee may be adjusted against the processing fee. Further, considering the quantum of work and discussion involved with the Regional Load Despatch Centres and the State Transmission Utilities, the time of 90 days as provided in the draft regulations would not be sufficient. Accordingly, it is suggested that the decision in regard to time period required should be left to POWERGRID on case to case basis depending on the work content.

37. BSES has observed that making the Central Transmission Utility, as nodal agency is not in line with the Act. The Act makes it clear that in the normal course, if the transmission licensee and open access applicant arrive at a mutual understanding, there is no need to burden either the Commission or the Central Transmission Utility for determination of open access charges, coordination, etc. It has further observed that in future when there will be other inter-state transmission licensees, the applicant need to approach those licensees and not the Central Transmission Utility. It has suggested that in case of long-term customers, nodal agency should be the National Load Despatch Centre.

38. We find merit in the suggestion of POWERGRID regarding processing of application. However, we are of the opinion that the nodal agency should be able to intimate the open access customer whether or not the long-term access is possible without any system strengthening within 30 days. After receipt the intimation that access is not possible without system strengthening, the applicant can request the nodal agency to carry out detailed studies to arrive at cost estimates and completion schedule. The expenses on these detailed studies shall vary on case-to-case basis and the same shall be intimated by the nodal agency to the customer with sufficient justification. The applicant shall reimburse these expenses to the nodal agency after adjusting the application fee already paid. The cost estimates for system strengthening and completion schedule shall be intimated by the nodal agency within 90 days of receipt of request. As regards the suggestion of Adani Exports regarding additional transmission network, the draft regulations make it clear that tariff for system strengthening shall be shared by all

long-term customers (after accounting for revenue from the short-term customers) but tariff for dedicated transmission elements will have to be borne by the customer concerned. This stipulation is in order as system strengthening benefits all users but the dedicated transmission elements are for the benefit of its specific user only. We, therefore, do not find any need for change in this stipulation. The suggestion of BSES that provision of nodal agency is not applicable transmission licensees is not acceptable as we have already concluded that the regulations being specified by the Commission shall be applicable in this case also.

39. We also direct that the Central Transmission Utility shall issue necessary guidelines, procedure and application form for the long-term customers within 30 days of issue of this order.

Bulk Power Transmission Agreement

40. The draft regulations stipulate that an open access customer may enter into Bulk Power Transmission Agreement with the transmission licensee for use of the inter-state transmission system for five or more years and in that case such an open access customer shall be deemed to be a long-term open access customer.

41. BSES has observed that since right and obligation of the parties cannot be defined without agreement, the word 'may' should be replaced by the word 'shall'. MPCL has suggested that the existing customers having the Bulk Power Transmission Agreement for duration more than five years should be deemed to be the long-term customers and those having the Bulk Power Transmission Agreement for duration less than five years should be deemed to be the short-term customers. KERPL has suggested alternative formulation requiring all the long-term open access customers to enter into the Bulk Power Transmission Agreement.

42. We agree that it should be mandatory for all the long-term customers to enter into the Bulk Power Transmission Agreement. We accordingly direct the provision shall be modified as under:

“A long-term customer shall enter into Bulk Power Transmission Agreement with the transmission licensee for use of inter-state transmission system for twenty five or more years.”

Procedure for short-term customers

43. In the draft regulations the procedure proposed for procurement of the open access on short-term basis, is that the short-term open access customer is required to submit the application to the Regional Load Despatch Centre as the nodal agency on the application that may be prescribed by the Central Transmission Utility or the Regional Load Despatch Centre and for which no processing fee is payable.

44. Prayas and Railway Board have suggested to prescribe some processing fee for the short-term customers. KERPL has sought to clarify the information to be filed with the Regional Load Despatch Centre and has suggested that pricing information need not be sought as it is business-specific. It is also suggested that format for submission of information should be common for all the Regional Load Despatch Centres.

45. We accept the suggestion made by Prayas and Railway Board that some processing fee needs to be specified for short-term customers, as the Regional Load Despatch Centres need to be compensated for the additional work being entrusted to them. We accordingly direct that a non-refundable application fee of Rs. five thousand (Rs. 5,000/-) shall be payable by the short-term open access customer along with application. This fee shall not be adjusted towards the Regional Load Despatch Centre fees and charges approved or to be approved by the Commission. We direct the Regional Load Despatch Centres to jointly finalise and issue within 45 days of this order the necessary guidelines, procedure and application form for short-term customers.

Right of first refusal

46. As per the stipulations made in the draft regulations, the current open access customer shall have the first right of refusal to the capacity being used by him. Such an

open access customer shall be given preference in allotment, if he is willing to match the duration of service being sought by the potential customers.

47. POWERGRID has observed that implementation of this provision is not feasible as with each fresh application, approval of all the existing customers will have to be re-processed. It has, therefore, suggested processing of applications on “First come first served basis”. IPPAI has raised doubt whether the provision is discriminatory in nature.

48. As already discussed, we have decided to introduce provision for bidding in case of congestion. Thus, the short-term customer having capacity reservation will also be required to submit an application and also participate in the bidding if he wishes to extend his reservation of the transmission capacity at the expiry of the term. Since right to first refusal does not fit in well with the provision of bidding, we have decided to do away with this provision.

Non-utilisation of service

49. POWERGIRD has suggested that in the event of a short-term customer surrendering his capacity, he should be liable to pay the transmission and scheduling charges (similar to capacity charges under Availability Based Tariff).

50. NTPC has expressed that when allocating surplus capacity available due to surrender of the capacity by the short-term customer, the long-term customer should also be considered and the allocation should be in co-ordination with the Central Transmission Utility.

51. Prayas has expressed that if a long-term customer is temporarily unable to utilise the capacity, he should have option of temporarily surrendering the capacity and the Regional Load Despatch Centre should have authority to temporarily re-allocate such capacity.

52. RERC has suggested that the capacity should be construed to be surrendered only after a specific communication in this regard. It is also suggested that the time after which surrender of capacity will be effective should be defined.

53. KERPL has suggested that since the Regional Load Despatch Centre will be having scheduling information, no separate intimation for surrendering should be required. It has also suggested that the word 'frequently' is vague and subjective.

54. We agree with the observation of KERPL that the Regional Load Despatch Centre will know use of the capacity based on scheduling. However, since scheduling is done on daily basis, any intimation regarding surrender of the reserved transmission capacity will help the Regional Load Despatch Centres to look into and plan for the future period and not just a day. We maintain that the Regional Load Despatch Centre is entitled to cancel or reduce the capacity reserved for a customer in case the capacity is not adequately utilised by the customer. Separately, we have made it clear that despite surrender or cancellation of capacity, the customer is liable to pay the transmission charges as well as scheduling and system operation charges for the originally reserved capacity for the period of access granted. These provisions are necessary to obviate blocking of the transmission capacity by strong players. On the suggestion of Prayas about temporary surrender of the transmission capacity by the long-term customer, we are of the opinion that the Regional Load Despatch Centre is normally aware of the pattern of non-utilisation by the long-term customers. Still, it will be in the interest of the long-term customers to intimate the Regional Load Despatch Centre about non-utilisation for a substantial period so that the short-term customers can be accommodated, if possible. The revenue collected from the short-term customers will benefit all the long-term customers. The suggestion of NTPC to allocate capacity surrendered by the short-term customers to the long-term customers does not seem to be practical because of the difference in time period of access for such customers.

Transmission Charges

55. The proposals made in the draft regulations in regard to the transmission charges are given hereunder:

“The transmission charges for use of the transmission system of the Central Transmission Utility or the licensee by an open access customer shall be regulated as under:

(i) The long-term open access customers shall share the transmission charges determined by the Commission in accordance with the terms and conditions of tariff notified by the Commission from time to time.

(ii) The transmission charges payable by a short-term open access customer shall be calculated in accordance with methodology for calculation of wheeling charges for inter-state transmission specified in the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2001 as amended from time to time.

(iii) The transmission charges for the system strengthening shall be shared by all long-term open access customers in accordance with the terms and conditions of tariff notified by the Commission from time to time.

Provided that where a dedicated transmission system used for open access has been constructed for exclusive use of an open access customer, the transmission charges for such dedicated transmission system shall be borne by such open access customer.

Provided further that an open access customer for whose benefit the dedicated transmission system is to be constructed may decide on the agency for constructing such transmission system, subject to the provisions of the Act.”

56. According to Adani Exports, the transmission charges should not be asked from the short-term open access customers. In the alternative, it is suggested that the Commission may consider nominal transmission charges keeping in view voltage level as well as residual life of transmission lines for the short-term traders. POWERGRID has though favoured levy of transmission charges on the short-term open access customers, in its opinion the procedure and methodology for calculation of charges need elaboration and detailing. POWERGRID has suggested that the rates may be fixed for one year and money collected may be put into a "Transmission Development Fund". According to POWERGRID, a proportion of this (about 20%) be paid to the Central Transmission Utility against the extra burden and associated additional maintenance costs and the balance amount may be used for future investment in developing and augmenting power system. POWERGRID has also suggested that Foreign Exchange Rate Variation and income-tax are claimed as passed through on annual/half yearly/quarterly basis. Therefore, in case of short-term customers, POWERGRID will have to collect the amount on provisional basis, subject to adjustment.

57. GEB has prayed that appropriate transmission charges for the short-term customers should be outlined in keeping with the fact that such usage provides greater commercial flexibility to such customers compared to the long-term customers who are bound to pay the transmission charges for the capacity reserved for them. According to GEB, it would not be just and equitable for the new entrants under open access to derive benefits at the cost of the existing beneficiaries and claim open access on same terms and conditions as applicable to the existing beneficiaries. According to GEB, non-discriminatory open access as provided in the Act, not only means that the equals should be treated alike but also that unequals should not be treated alike.

58. BSES has favoured adoption of time-of-the-day pricing because otherwise there may be severe congestion on the line during the peak demand.

59. Power Trading Corporation Ltd (PTC) has expressed that if the transmission charges are shared on capacity allocation/contracted power basis, there would be no

differentiation between round-the-clock power and time-of-the-day power during a day and between contract for a whole month or a part of the month. PTC has, therefore, concluded that such an arrangement would make transaction for a part of the month and for a limited number of hours in a day unattractive. PTC has suggested that in case of a utility selling power to another in a different region, additional wheeling charges should not be levied for the exporting region to the extent of selling utilities allocation in the Central Transmission System since this is being already paid for by the utility. PTC has further contended that since the short-term customer will be allowed to have only incidental usage for the transmission system, wheeling charges imposed should be nominal. PTC has suggested that the charges for the short-term customer should not exceed 1/10th of the charges applicable to the long-term user. PTC has pointed out that some State Transmission Utilities are insisting upon compensation for parallel flow through their transmission system even when alternative path of central transmission system is in place. PTC has, therefore, contended that parallel flows need to be ignored in the overall interest of the reliability and optimisation at the national level, these being only incidental.

60. On the issue of construction of dedicated transmission system, PTC has pointed out that in case of evacuation of power from the central generating stations, the transmission system is usually planned and developed by the Central Transmission Utility to evacuate power straight from bus bars of the generating station, whereas in case of IPPs they are required to construct a dedicated transmission link up to the nearest service station, adding to cost of power supplied by them. PTC has suggested a uniform policy in this regard.

61. IPPAI feels that the provision of recovery of the transmission charges on capacity allocation basis and not on the basis of use of capacity.

62. Shri Bhanu Bhusan has suggested that the open access customers using the surplus capacity should not pay any transmission charges but should bear the incremental transmission losses only. Alternatively, a nominal transmission charge of 1

paisa per 100 Km may be applied on such open access customers. The open access customers desiring usage rights over the transmission system should pay proportionate transmission charges and also bear the proportionate transmission losses.

63. WBSEB and Chhatisgarh State Electricity Board (CSEB) have suggested that the original beneficiaries should not be required to pay additional transmission charges for the Central Transmission Utility system, including for trading and usage in open access.

64. We have noted that while PTC and Adani Exports have favoured nominal transmission charges for the short-term customers, GEB seems to favour higher charges for such customers. Even if the argument of GEB that the short-term customers enjoy greater flexibility is accepted, overall their service is significantly of lower quality mainly due to lower reliability during the term but also due to uncertainty of getting fresh reservation at the end of the term. We are, therefore, of the opinion that in an uncongested transmission corridor, the short-term customers should pay about 1/4th of the charges applicable to the long-term customers. This fits in well with the philosophy of non-discrimination aptly summed up by GEB that only equals should be treated alike and not unequals. The lower rate of transmission charges for short-term customers will also benefit long-term customers if they want to have short-term transactions either through bilateral exchange or trading as we have separately clarified that even long-term customers will have to seek open access for new transactions. Since the exact charges for any particular year are not known in advance due to uncertainty in tax payments and Foreign Exchange Rate Variation, etc, we direct that the annual transmission charges for the previous year should be the basis for calculation of the charges per MW per day. If transmission charges for a transmission licensee are not separately available, the rate in Rupees per MW per day as calculated for the regional system of the Central Transmission Utility shall be applied. The annual transmission charges when divided by the average capacity served by the transmission system and number of days in a year (365) will give the transmission charges payable by the short-term customer in Rs per MW per day. The minimum transmission charges payable shall be for one day and in multiple of whole number of days thereafter. The average capacity served by the network

shall be the sum of the generating capacity connected to the transmission system and contracted capacities of other transactions handled by the transmission system. In case of congestion, that is, when total capacity sought to be reserved by two or more short-term customers exceeds the anticipated available transmission capacity, the transmission capacity should be reserved for the customer(s) who value the transmission most, that is, those who are willing to pay more. This can be effected if the Regional Load Despatch Centre invites bids by Fax/e-mail with floor price equal to the uncongested price for the short-term customers. For this purpose, the bidders shall quote percentage point above the floor price. The reservation of capacity has to be done in decreasing order of the price quoted. In case of equal price, if required, the reservation of transmission capacity should be done *pro rata* to the capacity sought. The customer getting reservation for a capacity less than the capacity sought by him shall pay charges as per the price quoted by him. All other customers getting transmission capacity reservation equal to the capacity sought by them shall pay charges as per the price quoted by the last customer getting transmission capacity reservation for the capacity sought. This stipulation is essential to keep the price same for all the customers getting same quality of service. However, charges for the customer getting partial allotment should be lower as his requirement has already been curtailed.

65. We also direct that all the Regional Load Despatch Centres shall jointly formulate a detailed procedure for reservation of transmission capacity for the short-term customers, including the procedure for bidding within 45 days of issue of this order.

66. We are not impressed by the argument of POWERGRID that it needs to be compensated for extra maintenance. Since the capacity allotment/reservation shall be made based on availability of the transmission capacity, the question of extra maintenance should not arise. However, we direct that 25% of the revenue received from the short-term customers shall be retained by the transmission licensee, which is expected to be utilised in the core activity of building new transmission system. The balance 75% shall be used for reduction in charges payable by the long-term customers of the transmission charges determined as per the terms and conditions of the tariff

notified by the Appropriate Commission. For example, as per the present notification dated 26.03.2001

- (a) The transmission charges shall be computed based on clause 4.4.
- (b) The sharing formula in clause 4.6 shall be applicable for the long-term customers, taking into account adjustable revenue from the short-term customers
- (c) Sharing of transmission charges of inter-regional assets among the long-term customers of the contiguous regions in the ratio of 50:50 shall be done taking into account adjustable revenue from the short-term customers

67. We make it clear that clause 4.9 of the notification dated 26.3.2001 dealing with wheeling charges shall not be applicable after the regulations on open access in the inter-state transmission have come into force. If the transmission charges for a transmission licensee such as an integrated entity like State Electricity Board are not separately available, the charges payable for use of the transmission system of the Central Transmission Utility shall be applicable.

68. On the observation of PTC that charges would not be attractive for part-day or part-month transactions, we may point out that shorter the duration of use, the more intense the use is likely to be. For example, a generator seeking access for part of the day is likely to have near unity load factor, but in case of an annual access, the load factor is likely to be less. Further, in case of congestion, the open access customer himself will be quoting the price depending on perceived value of transmission access. We agree with PTC that parallel flows are incidental and need to be ignored for the moment. It is difficult to quantify the parallel flows and hence are difficult to be compensated. The parallel flows through the State Electricity Boards/State Transmission Utility system should normally be insignificant in any inter-state transaction. However, in case of inter-regional lines owned by the State Electricity Boards/State Transmission Utility, such flows are clearly measurable and the owner, the State Electricity Boards or the State Transmission Utility should be compensated for the use by the open access customers.

69. The difference in policy of recovering charges for dedicated lines from the generating station to the nearest point in the transmission network in case of the central power generating stations and IPPs, pointed out by PTC, is of no practical significance. The central power generating stations, with a few exceptions, are generally the multi-beneficiary stations and hence clubbing the transmission charges with generation tariff or recovering them separately from the beneficiaries hardly makes any difference, except that in the former case, lower despatch could result in under-recovery of the transmission charges also. In future, when multi-beneficiary IPPs come into existence, they can also be treated similarly. If access is sought by a customer other than the long-term customer(s), the generator will either include the transmission price in cost of power or the customer will pay open access charges depending on the arrangement.

70. We do not find merit in the suggestion of WBSEB, CSEB and PTC that no transmission charges should be levied on the original beneficiaries in the exporting region if the system owned by the Central Transmission Utility is used for trading and open access. The Central Transmission Utility system is planned and designed primarily for evacuation of power from the central power generating stations and delivery to the beneficiary having firm allocation in these generating stations. Sharing of charges for the Central Transmission Utility system has traditionally been done in the ratio of capacity utilisation of the central power generating stations by the beneficiaries prior to Availability Based Tariff. Subsequent to implementation of Availability Based Tariff, the charges are levied in proportion to capacity allocation. The transmission of power from the central power generating stations to the beneficiaries imposes a particular flow pattern on the inter-state transmission system. This particular flow pattern changes whenever a new transaction is introduced. For this reason, the ratio of sharing of transmission charges also changes, taking into account allocation from a new central power generating station. On the same logic, any bilateral trading or open access transaction by the beneficiaries in the exporting region shall also change the flow pattern and must be taken care of in the manner of sharing of charges. Further, the beneficiaries having firm allocation are for all practical purposes owners of the Central Transmission Utility system as they assume the

responsibility of full payment of fixed charges, irrespective of the extent of use and we have already concluded that the provision of non-discrimination also means no differentiation between self-use and use of same nature by open access customers. We have introduced the provision for bidding to take care of congestion. The suggestion of BSES to have time-of-the-day pricing for transmission is not practical at the moment.

71. Accordingly, we direct insertion of following provisions for regulation of the transmission charges:

"The transmission charges for use of the transmission system of the transmission licensee for inter-state transmission shall be regulated as under, namely:

(i) The annual transmission charges shall be determined and after deducting the adjustable revenue from the short-term customers, these charges shall be shared by the long-term customers in accordance with the terms and conditions of tariff notified by the Commission from time to time.

(ii) The charges payable by a short-term customer shall be calculated in accordance with the following methodology:

$$ST_RATE = 0.25 \times [TSC / Av_CAP] / 365$$

Where:

ST_RATE is the rate for short-term open access customer in Rs per MW per day.

Note

ST_RATE shall be calculated and applied for each - (a) regional system (b) inter-regional link, and (c) system of the State Transmission Utility or the State Electricity Board or any other transmission licensee forming part of the inter-state system.

TSC means the Annual Transmission Charges of the transmission licensee for the previous financial year allowed by the Appropriate Commission.

Av_CAP means the average capacity in MW served by the transmission system of the transmission licensee in the last financial year and shall be the sum of the generating capacities connected to the transmission system and contracted capacities of other transactions handled by the system of the transmission licensee.

(iii) The minimum transmission charges payable by a short-term customer shall be for one day and in multiple of whole number of days thereafter.

(iv) Non-availability of TSC for the transmission system shall not be reason for delay in providing transmission access. In the exceptional circumstances, if TSC for any transmission licensee are not available, the per MW per day charge applicable for the system owned by the Central Transmission Utility of the region in which the system of transmission licensee is situate, shall be used. Every transmission licensee shall declare rate in Rs per MW per day and this rate shall remain fixed for a period of one year.

Provided that in case of north-eastern region, where the Uniform Common Pooled Transmission Tariff (UCPTT) of 35 paise/KWh is applicable, the Central Transmission Utility shall notify ST_RATE as 25% of the UCPTT in Rs/MW/Day.

Provided further that where reservation of transmission capacity has been done consequent to bidding in the manner specified in Regulation 6, the ST_RATE shall be taken as the floor price for bidding.

(v) 25% of the charges collected from the short-term customer shall be retained by the transmission licensee and the balance 75% shall be adjusted

towards reduction in the transmission charges payable by the long-term customers."

Time-schedule for Processing Application

72. The draft regulations have proposed the following time schedule to be adhered to by the nodal agency for processing of the application for grant of open access:

| S.No. | Duration of service | Max. Processing time |
|-----------|---------------------------|----------------------|
| 1. | Short-Term Service | |
| | Up to One day | One day |
| | Up to one week | Three days |
| | Up to one month | Seven days |
| | Up to one year | Thirty days |
| 2. | Long-Term Service | |
| | Five years or more | Ninety days |

73. Adani Exports has suggested the processing time of half day, one day and three days for short-term service of up to one day, one week and one month respectively. It has also suggested processing time of 60 days for long-term service. PTC and KERPL have also favoured reduction in processing time for short-term service to promote development of effective spot market.

74. Keeping in view suggestions of the stakeholders, we expect the Regional Load Despatch Centre to process application within 12 hours for day/part-of-the-day short-term customers and within 2 days for weekly customers. The maximum processing time for the short-term customers seeking access up to one month and up to one year may not be reduced as this may require some detailed examination of the request by the Regional Load Despatch Centre. Processing of application for the long-term customers has already been discussed. Accordingly, the time schedule for the processing of applications for open access shall be as under:

| S.No. | Type of service/activity | Max. Processing time |
|-------|--------------------------|----------------------|
| | | |

| | | |
|-----------|---|-------------|
| 1. | Short-Term Service | |
| | Up to One day | 12 hours |
| | Up to one week | Two days |
| | Up to one month | Seven days |
| | Up to one year | Thirty days |
| 2. | Long-Term Service | |
| | Intimation regarding feasibility of access without system strengthening | 30 days |
| | Intimation of results of studies for system strengthening with cost estimates and completion schedule | 90 days |

Curtailment priority

75. According to the draft regulations, when because of the transmission constraints or otherwise, it becomes necessary to curtail the transmission service, the short-term open access customers shall be curtailed first followed by the long-term open access customers. However, within the category, the open access customers shall have equal curtailment priority and shall be curtailed on pro rata basis.

76. BSES is of the view that curtailment of open access should not be decided independent of its end use. For example, if a distribution licensee has sought open access to supply to its consumers, even though it is a short-term transaction, its curtailment would affect supply to millions of consumers. Further, according to BSES an individual should also have right to decide its curtailment, that is, a long-term customer may be willing to sacrifice some part of his reliability for a discounted or lower open access charges. As against this, a short-term customer may be willing to pay higher charges to ensure that he is not curtailed at any point of time.

77. IPPAI has pointed out that under the draft regulations, one-day customer and one-year customer have been placed at same pedestal and enjoy the same curtailment

priority, both falling under the category of short-term customer. IPPAI has further contended that the sanctity of the contract is lost if a firm contract can be replaced with the one of higher duration. IPPAI has also sought clarification as to the scope of curtailment “on pro rata basis” in case of the open access customers within the same category.

78. Railway Board has suggested that the curtailment priority should be based on MW-mile – year and purpose of use. It is contended that the national interest, such as of the Railways may be kept in view while defining the principles for curtailment.

79. KERPL has expressed a view that curtailment due to transmission constraints should be done on pro rata basis, irrespective of duration of the contract.

80. On the suggestion made by BSES regarding curtailment based on end use and that made by Railway Board to keep national interest in view, we have already discussed that a short-term transaction because of its inherent nature cannot be depended upon to meet essential requirements. We have further elaborated that the assessment of transmission system availability for short-term customers done by the Regional Load Despatch Centres is expected to have reasonable degree of firmness. Still, higher degree of reliability can be achieved only through long-term access by paying relatively higher transmission charges. The other suggestion of BSES that a long-term customer may curtail his service to increase reliability of the short-term customer essentially amounts to trading of transmission rights, which we propose to discuss under “other issues” in this order.

81. On the issue of sanctity of contract and the meaning of pro rata curtailment raised by IPPAI, we would like to clarify that the provision of higher priority to longer duration contract was in respect of allotment/reservation only (which we have now replaced with the provision of bidding) and once transmission capacity has been allotted/reserved, the curtailment shall be on pro rata to the capacity allotted/reserved in the event of transmission constraint.

Other Commercial Conditions

82. The draft regulations have proposed that for transmission service charges and scheduling and system operation charges such as terms of payment, creditworthiness, indemnification and force majeure shall be mutually settled.

83. According to BSES, instead of mutual settlement outside the framework, these issues should be reflected in the tariff, which is a normal way in any commodity sale. Thus, tariff for sale to an “AAA” rated licensee would be lower than that of financially weak applicant, whose creditworthiness is suspect. BSES, therefore, has suggested that in case of regulated business where the open access charges stipulated by the Commission are to be used, the tariff determined by the Commission should be the benchmark level and the band of +/- 15% should be allowed to the licensee. As an alternative, it is suggested that till such time the market matures and is able to price such risks appropriately, a standard risk allocation pattern may be employed. Rajasthan Electricity Regulatory Commission (RERC) has suggested that provisions pre-requisite for long-term as well as short-term open access customers, for example, agreements, effectiveness of these agreements should be introduced.

84. In our opinion, it may not be desirable to differentiate prices based on credibility of the customer. However, we agree with the alternative suggestion made BSES to have standard contract. A uniform payment mechanism with built-in safety features will bring all the customers at par. We direct that standard provisions for terms of payment, creditworthiness, indemnification, force majeure and any other commercial condition, if required, should be developed by the Central Transmission Utility and the Regional Load Despatch Centres (jointly) for long-term and short-term customers respectively within 60 days of issue of this order. A compliance report on this shall be furnished by the Central Transmission Utility within the stipulated period.

Scheduling and System Operation Charges

85. The draft regulations on Scheduling and System Operation Charges stipulate as under:

“(i) The scheduling and system operation charges of Rs.3000/- per day or part of the day shall be paid to each Regional Load Despatch Centre and State Load Despatch Centre involved by short-term open access customer.

(ii) For each schedule revision, an additional amount of Rs.2000/- shall be payable by short-term open access customer at whose instance the schedule is revised. The schedule revision charges shall be payable to each Regional Load Despatch Centre and State Load Despatch Centre involved in the transaction.

(iii) The scheduling and system operation charges including the charges for schedule revision collected by the Regional Load Despatch Centre in accordance with clauses (i) and (ii) above, shall be deducted from the charges and fees approved by the Commission and the net charges so arrived at shall be shared by the long-term open access customers on pro rata basis.

Explanation

Scheduling and system operation charges shall be payable by a generator when allowed open access under these regulations.”

86. Adani Exports has commented that the charges prescribed are on the higher side. It has suggested Rs 1000/- charges on per day basis plus Rs 500/- for every schedule revision.

87. POWERGRID has observed that a daily scheduling of open access transactions, including its revision involves additional effort and time of the Regional Load Despatch Centre personnel, besides involving additional communication and manpower expenses.

It has, therefore, suggested that the scheduling and system operation charges paid to the Regional Load Despatch Centres be allowed as compensation. Further, according to POWERGRID, the regulations give impression that state utilities deemed to be long-term customers, are liable to pay scheduling and system operation charges. POWERGRID has prayed for a review.

88. BSES has opined that in case delivery and receipt of power is spread over different regions, it may result in double payment of charges by both, the generator and the supplier at the delivery end on one hand and the customer at the receipt end on the other. This is because both the generator/supplier and the customer have to indicate their injection and drawal schedules respectively. Further, in certain transactions number of the State Load Despatch Centres and the Regional Load Despatch Centre involved may be four or more and since charges are to be paid to each of the Regional Load Despatch Centre and the State Load Despatch Centre the Regional Load Despatch Centre involved, it may impede the transaction. BSES has, therefore, suggested Rs.1,000 per day towards system operation and scheduling charges.

89. PTC, MPCL, KERPL and NTPC have also observed that the charges proposed are high. Further, PTC has doubted whether these charges are applicable on per transaction basis and not on customer basis and has also sought clarification regarding periodicity of payment of charges. NTPC has suggested that these charges should be reduced to Rs 1000/- per day and should be payable to the Regional Load Despatch Centre and the State Load Despatch Centre at the drawal point. NTPC has argued that the charges for revision should not be payable by the generator, if the revision is sought by consumer.

90. KERPL has sought a clarification as to whether these charges are to be paid in advance for total transaction or daily or in stages.

91. We have noted that a large number of stakeholders have commented that the daily charges, the charges for revision coupled with the charges payable to each Regional Load Despatch Centre and State Load Despatch Centres involved, make the

total amount of scheduling and system operation charges very high. We, therefore, propose to dispense with the charges for revision of schedules, as even the long-term customers do not pay charges on this basis. Further, since number of revisions cannot be predicted, a *post facto* adjustment in the advance collected on this account may be required. We, therefore, direct that the charges shall be payable @Rs 3000/- per day by each short-term customer. We accept the argument of POWERGRID that scheduling of open access transactions involves additional work and effort, not factored into the Regional Load Despatch Centre fees and charges determined by the Commission. We, therefore, direct that the charges collected from the short-term customers shall be additional revenue and shall not be adjusted against the fees and charges for the Regional Load Despatch Centre or the State Load Despatch Centres approved by the Appropriate Commission. We do not anticipate any significant increase in the long-term customers and, therefore, the fees and charges for the Regional Load Despatch Centres and the State Load Despatch Centres approved by the Appropriate Commission shall be shared *pro rata* to the capacity in MW. In case the State Load Despatch Centre charges are not separately available for any reason, the long-term customers may also be charged @ Rs 3000/- per day. We may point out that the fees and charges for the Regional Load Despatch Centres approved by the Commission are valid up to 31.3.2004. The Commission shall take a comprehensive review of these charges while fixing these charges for the subsequent period, taking into account the volume of work involved and the manpower required.

92. On the possibility of double payment pointed out by BSES, we may clarify that the scheduling and system operation charges shall be payable by the customer who has sought open access. This customer can either be a generator or a consumer. The question of double charging should normally not arise.

93. The scheduling and system operation charges are payable on per customer basis. We direct that the Regional Load Despatch Centres shall jointly finalise the modalities of payment and communicate to all concerned. We, however, direct that advance up to one

month can be sought in case of the short-term customers for the transmission charges and the scheduling and system operation charges.

Special Energy Meters

94. The draft regulations lay down that

“The Special Energy Meters shall be installed by the direct open access customers and if required, also by the embedded customers.

The Special Energy Meters installed shall be capable of time differentiated measurements (15 minutes) of active and reactive energy as specified by the Central Transmission Utility or the Regional Load Despatch Centre concerned.

The Special Energy Meters shall always be maintained in good condition.

The Special Energy Meters for the direct customer shall be open for inspection by any person authorised by the Central Transmission Utility or the Regional Load Despatch Centre.”

95. POWERGRID has suggested a correction that meter should be capable of voltage differentiated reactive energy. NTPC has suggested that the existing practice of providing meters by the Central Transmission Utility should continue, to avoid disputes on account of calibration, data collection, etc. Shri Bhanu Bhushan has suggested that the Special Energy Meters should be installed by the Central Transmission Utility for the direct customers and by the concerned State Transmission Utility for the embedded customers. Prayas has pointed out that the authority to decide the necessity of installing Special Energy Meters by the embedded customers is not clear.

96. In the scheme of reactive energy pricing approved by the Commission, the reactive energy injection and drawal is priced depending on the voltage condition. Thus, it is logical that meters should be capable of voltage-differentiated measurement of reactive

energy as suggested by POWERGRID. We direct the regulations be finalised accordingly.

97. We are of the opinion that the issue as to who should install the Special Energy Meters is of not much significance. The cost has to be borne by the customer and hence as long as it is ensured that the meters are of the prescribed specification and are maintained in good condition, we will not like to enter into a debate on this issue. The desirability of installing these meters in case of embedded customers is to be sorted out between the State Transmission Utility and the customer. We favour immediate implementation of UI mechanism for intra-state transactions but the same may be applied for the open access customer in isolation also.

UI Charges

98. The mismatch between the schedule and the actual has been proposed to be met from the grid and governed by the UI pricing mechanism applicable to the inter-state transactions.

99. BSES has expressed that application of UI charges for direct customer may not be a problem but in case of the embedded customer, exact sharing of UI charges may pose some difficulty until and unless intra-state Availability Based Tariff is implemented. KERPL has suggested that the short-term customers should not be involved in UI charges as their power requirement may be small and for short duration.

100. The issue posed by BSES has been addressed earlier while discussing Special Energy Meters. There is no merit in the suggestion of KERPL that UI charges should not be applied for the short-term customers. Deviations from the schedule are bound to happen despite all precautions and there has to be a mechanism to price these deviations, which are met from the grid. The existing scheme of UI charges provides for the mechanism for pricing of these deviations and logically, this should extend to open access customers also.

Reactive Energy Charges

101. According to the draft regulations, the payment for the reactive energy charges for the direct customers on account of open access are to be calculated in accordance with the scheme applicable to transactions involving inter-state transmission approved by the Commission from time to time. The reactive energy charges payable or receivable by the State utilities are proposed to be paid to or received from the pool by the State utility concerned and are not to be apportioned to the embedded customers. The draft regulations envisage that the reactive energy drawals and injections by the embedded customers shall be governed by the local regulations.

102. Prayas has observed that use of words “state utility” is not sufficiently clear. KERPL has expressed that the reactive energy charges should not be applied on open access customers particularly on the short-term customers.

103. On consideration of the observation of Prayas, we direct that “State Electricity Board/State Transmission Utility” shall replace the word state utility. The suggestion of KERPL cannot be accepted as the reactive energy drawals and injections affect the voltage conditions and they have to be curbed when the voltage gets affected adversely.

Reporting

104. In accordance with the provisions made in the draft regulations, each Regional Load Despatch Centre has been made responsible to submit a report by 10th day of every month in the prescribed format.

105. According to POWERGRID reporting requirement stipulated in the regulations would be an additional burden on the Regional Load Despatch Centres. It has suggested that reporting may be made exceptional. NTPC has suggested that start date of transaction and cost of power should also be reported. Prayas has observed that (i) a unique contract ID should be given to all open access contracts, (ii) a column specifying average daily maximum capacity utilisation may be introduced, and (iii) these reports should be available on the CERC website in a format that allows analysis. KERPL has pointed out that information regarding availability of transmission corridors is not directly

available on the website of the Regional Load Despatch Centres. After reaching the agreement, when the Regional Load Despatch Centres are approached they express their inability to accommodate the transaction thereby resulting in waste of time and money on the negotiations leading to agreements. KERPL has also pointed out that the websites of the Regional Load Despatch Centres lack uniformity and the information is not updated regularly.

106. We have had a fresh look at the reporting requirements and have come to the conclusion that the Commission should not be looking at the reports microscopically to perform the role of a police-man. Instead, we feel that the market players should keep a watch on the transactions and start action to remedy the situation, where called for. For this purpose, the information should be available in public domain. More than highlighting the malpractice, discrimination, etc, this information shall help the market players in assessing the availability of the transmission system and feasibility of open access transactions. In our order dated 14.11.2003, we had observed that the real time information system is neither practical nor required for the present. However, we now feel that at least some information should be available on the website of the Regional Load Despatch Centres and the State Load Despatch Centres so that the market players can keep a watch on the information available to avail any opportunity for trading / bilateral exchanges. Some information such as floor rate for the short-term customers, current utilisation of transmission capacity for self-use as well as use by others is required for the sake of transparency and to ensure non-discrimination. We, therefore, direct that the following information shall be maintained on the website of the Regional Load Despatch Centres/ State Load Despatch Centres:

- (i) Floor rate in Rupees per MW per day for the short-term customers along with supporting calculations in respect of all the transmission licensees located within the State or the region concerned.
- (ii) A status report on the current short-term customers indicating name of customer, period of the access granted (start date and end date), point(s) of injection and point(s) of drawal, transmission systems used (on the basis of region/ownership),

reserved transmission capacity and applicable rate (Rs per MW per day). This report shall be updated as and when the status changes.

- (iii) Month-wise/ year-wise report on past short-term customers indicating name of the customer, period of the access granted (Start date and end date), point(s) of injection and point(s) of drawal, transmission systems used (on the basis of region/ownership), reserved capacity, applicable rate (Rs per MW per day) and actual load factor. All previous reports shall also be available in the web-archives.
- (iv) Information regarding usage of the inter-regional links as well as interface between the Central Transmission Utility and State systems (in case of the Regional Load Despatch Centre) and inter-state links (in case of the State Load Despatch Centres) indicating time of updating, name of the link, total transmission capacity of the link, scheduled capacity use (giving customer-wise break-up) and current capacity of the link in use. This information should be updated at least on hourly basis and where ever feasible on 15 minute basis.
- (v) The information regarding average energy losses for the previous 52 weeks.

107. Most of the State Load Despatch Centres may not be having their own websites at present and, therefore, we allow a time of 180 days to them to have such web-based information system. All the Regional Load Despatch Centres, however, shall start posting the information on their website within 30 days of this order. We direct the transmission licensees to extend full co-operation in this regard to the Regional Load Despatch Centres and the State Load Despatch Centres concerned.

108. As far as redressal mechanism is concerned, we would like to have a filter between the market players and the Commission, so that only unrelenting and unresolved problems come before the Commission. This will save the Commission from getting involved in petty problems of local or day-to-day nature, which can be resolved locally. We, therefore, direct that the problems, unfair practices or any other matter related to open access in the inter-state transmission system should first be brought to the notice of the Member Secretary, Regional Electricity Board or the Regional Power Committee of the region in which the agency against whom the complaint is directed, is

located. The Member Secretary, Regional Electricity Board or the Regional Power Committee, as the case may be, in turn shall take up the matter with agency concerned and shall attempt to resolve the issue within a suitable timeframe depending on nature of the problem. However, the unresolved issues or disputes may be referred to the Commission. We have decided to entrust this responsibility to the Member Secretary, Regional Electricity Board or the Regional Power Committee because we feel that he is well versed with the ground realities, being in regular contact with various regional entities and is not an interested party.

Other Issues

109. BSES has pointed out that after securing open access transmission right, there may be change in business plan or the applicant may require access at certain time of the day only. In view of this, BSES has raised the issue of trading of open access/transmission right. Since such a step may lead to speculation and excessive profiteering, appropriate risk mitigation structure can be put in place. Alternatively, BSES has suggested that trading in open access right may not be allowed at the beginning and position may be reviewed after 1-2 years. BSES has suggested that Commission should stipulate a time period after which a detailed review of these regulations may take place. Another related issue brought forward by BSES is whether an applicant can book open access right for his use for a future period. IPPAI has also raised issue of trading of transmission capacities. IPPAI has contended that the Commission's order overlooks Section 42(3) of the Act, which empowers a consumer to select his preferred source of supply of electricity. In the opinion of IPPAI, since inter-state transmission includes all intervening state transmission facilities used, any consumer who is on high pressure (66 KV and above) will be able to receive inter-state power with immediate effect and not when the State Commissions decide to provide it. IPPAI has argued that assumption behind the order that open access is available only for surplus capacity is not only contrary to the provisions of the Act but provides for discriminatory rather than non-discriminatory open access. IPPAI has, therefore, suggested that any preservation of right of so-called original beneficiary should be done only through a transparent process where equal opportunity is made available to the new players to compete on equal basis.

IPPAI has suggested that there should be incentive for the transactions involving paths other than direct path or those leading to reverse power flow. This incentive can be in the form of waiver of transmission charges and incremental losses. This, according to IPPAI, would give correct signals to the investors and encourage fresh capacity addition in the congestion areas.

110. RERC has suggested a stipulation to the effect that surcharge on transmission charges shall be payable to the State Transmission Utility or the licensee, as the case may be, designated by respective State Electricity Regulatory Commission.

111. In the opinion of KERPL, there is an urgent need to decide on the surcharge payable under Section 38(d) of the Act. KERPL has pointed out that the State Electricity Regulatory Commissions have not taken any decision on the additional surcharge applicable under Section 42(4) of the Act. KERPL has requested this Commission to issue uniform guidelines in this regard, otherwise each State Electricity Regulatory Commission may issue its own formula.

112. On the issue of trading of transmission rights, we have already directed that a long-term customer shall have option to surrender or transfer allotted transmission capacity to another long-term customer before 25 years with the approval of the Commission and subject to payment of such compensation as may be decided by the Commission. Presently, we do not favour transfer of the reserved transmission capacity among the short-term customers, as it may lead to speculation. We have also provided option to surrender the reserved transmission capacity to the short-term customers without any change in payment obligations.

113. As far as booking for future access rights is concerned, in case of the long-term customers, in general the request for booking shall have to be made well in advance, taking into account the period required for construction of transmission lines. In case of the short-term customers, it is neither possible for the Regional Load Despatch Centre to assess availability at a distant period of time nor it may be possible for the market players

to assess feasibility of the short-term transactions. Therefore, we grant liberty to the Regional Load Despatch Centres to take care of this aspect into the guidelines and procedure to be formulated by them.

114. In our opinion, the understanding of IPPAI that all transmission lines operating at 66 KV and above form part of the inter-state transmission system is not correct. While discussing the observation of KERPL on the definition of embedded customer, we have already given our thought that no transmission element of the State Electricity Boards or the State Transmission Utility system can be permanently labeled as the inter-state transmission system but the system owned or operated by the Central Transmission Utility always forms part of the inter-state transmission system. The suggestion of IPPAI to apply transmission charges based on transmission path would necessitate determination of charges based on contract path method. The disputes regarding the transmission path used involve complication, which should be avoided at least for the present. The contention of IPPAI that the Commission's order ignores Section 42(3) of the Act, is not necessarily correct as this section deals with the consumer of a distribution licensee, the regulations for which are to be made by the State Electricity Regulatory Commissions. We exercise jurisdiction over the inter-state transmission system and the regulations when notified will take care of this aspect.

115. We are also of the view that Section 38(2) (d) should not be read in isolation to conclude that open access to surplus capacity is contrary to the provisions of the Act. Firstly, it must be understood that a new application for the access has to be dealt with based on availability of the transmission capability. Indiscriminate access without any consideration for the transmission capability may lead to collapse of the system. Further, if the provision of open access is interpreted as if the entire transmission capacity is to be allotted afresh based on open access, this may have dangerous connotations. The Central Transmission Utility system has been planned and developed primarily to evacuate power from the central power generating stations and deliver it to the State Electricity Boards and their successor entities. If the transmission capacity is to be allocated afresh, the efforts in planning and investment done so far may get wasted to a

varying extent and some of the State Electricity Boards and the successor entities may not be able to draw power allocated from the central power generating stations. This will be incongruent with Section 38(2)(b) and (c) of the Act, which requires the Central Transmission Utility to undertake planning and co-ordination relating to the inter-state transmission system and to ensure development of an efficient transmission system for smooth flow of electricity from the generating stations to the load centres.

116. As regards incentive in the form of waiver of incremental losses for reverse flow, we have decided to apply proportionate losses estimated by the Regional Load Despatch Centre or the State Load Despatch Centre concerned. This is because some transaction may lead to reduction in energy losses and which transaction is having what effect on the energy losses requires detailed *post facto* study. To us, a much simpler and practical approach appears to distribute losses on *pro rata* basis. We, accordingly, direct that sharing of losses shall be done as under:

“All users shall bear average energy losses in the transmission system as estimated by the State Load Despatch Centre or the Regional Load Despatch Centre concerned. The energy losses shall be adjusted in kind and shall be compensated by additional injection at the injection point(s). The information regarding average energy losses for the previous weeks/months shall be posted on the website of State Load Despatch Centres and Regional Load Despatch Centres.”

117. In earlier part of this order, at a number of places we have directed the Regional Load Despatch Centres to jointly formulate procedure, guidelines and application forms, etc. We consider that the efforts of the Regional Load Despatch Centres need to be coordinated. We assign the job of coordination to the Central Transmission Utility.

118. We are conscious of the fact that the work of the Central Transmission Utility, the Regional Load Despatch Centres, the State Load Despatch Centres, State Transmission Utilities, etc shall increase on account of implementation of the regulations on the terms

and conditions of open access, when notified. But this is need of the hour and requirement of the law. We expect all the agencies to accept their new responsibilities with pride with the aim of strengthening the power sector and also implementing the provisions of the Act in letter and spirit.

119. We direct that based on the decisions contained in the preceding paragraphs, immediate steps shall be taken for notification of the regulations in accordance with the prescribed procedure.

Sd/-
(K. N. SINHA)
MEMBER

Sd/-
(ASHOK BASU)
CHAIRMAN

New Delhi, the 30th January 2004